



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
|-----------------|-------------|----------------------|---------------------|
|-----------------|-------------|----------------------|---------------------|

09/649,692 08/28/00 PEASE

T 141.009

PM82/0830

ANDREW J NILLES
NILLES & NILLES SC
FIRSTAR CENTER SUITE 2000
777 EAST WISCONSIN AVENUE
MILWAUKEE WI 53202-5345

EXAMINER

HORTON, Y

ART UNIT

PAPER NUMBER

3635

DATE MAILED:

08/30/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/649,692

Applicant(s)
TYLER E. PEASE

Examiner
YVONNE M. HORTON

Art Unit
3635



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Aug 28, 2000
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-20 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6-8, 11, 12, 14, and 15 is/are rejected.
- 7) ☒ Claim(s) 3-5, 9, 10, and 13 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3 20) ☐ Other:

Art Unit: 3635

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because fail to not include *any* of the reference sign(s) mentioned in the description. Correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent #5,638,651 to FORD. FORD discloses an insulated wall panel (10) including a foam sheet (15) having first and second planar sides (unlabeled) and grooves (26), first and second reinforcing strips (24) received in respective grooves (26), and first and second reinforcing layers (12). Regarding claim, FORD also discloses two downwardly extending flanges (F), see the marked-up attachment.
4. Claims 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent #5,638,651 to FORD. The structure of FORD inherently discloses the method of manufacturing an insulated panel including the steps of creating a foam block (15); cutting the block; inserting

Art Unit: 3635

reinforcing strips (24), covering the strips (24) with a reinforcing layer (12); and bonding the first reinforcing layer (12) to the foam sheets (15). And regarding claim 12, bonding a second reinforcing layer (12).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent #5,638,651 to FORD. FORD discloses the basic claimed panel except for explicitly disclosing bonding the reinforcing layer to define a vapor barrier and the tensile strength of the reinforcing layers. Although FORD is silent with respect to forming a vapor barrier, it is obvious from the materials used in FORD (i.e. foam and steel) that the steel material offer a vapor barrier to the

Art Unit: 3635

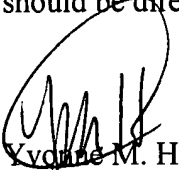
porous foam material. Regarding the strength of the reinforcing layer, FORD, col 3 line 49 requires a high tensile strength material. The selection of a known material on the basis of its suitability for the use intended is an obvious matter of design choice.

8. Claims 14 and 15 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent #5,638,651 to FORD. FORD discloses the basic claimed method except for the steps of applying adhesive and rolling the reinforcing layers. Although FORD does not disclose the use of and adhesive, it would have been obvious to one having ordinary skill in the art to provide the panel of FORD with adhesive in order to provide the panel and its exterior face with additional reinforcement in ensuring the facings are maintained properly against the foam sheet.

Allowable Subject Matter

9. Claim 3-5,9-10,13 and 16-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvonne M. Horton whose telephone number is (703) 308-1909.


Yvonne M. Horton
Patent Examiner
Art Unit 3635
August 25, 2001



US005638651A

United States Patent [19]
Ford

[11] **Patent Number:** 5,638,651
 [45] **Date of Patent:** Jun. 17, 1997

[54] **INTERLOCKING PANEL BUILDING SYSTEM**

[76] **Inventor:** Vern M. Ford, 6287 N. 25 E., Idaho Falls, Id. 83401

[21] **Appl. No.:** 668,238

[22] **Filed:** Jun. 21, 1996

Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 295,598, Aug. 25, 1994, abandoned.

[51] **Int. Cl.⁶** E04C 2/30; E04C 2/292

[52] **U.S. Cl.** 52/309.7; 52/90.1; 52/265; 52/269; 52/271; 52/284; 52/293.3; 52/277; 52/309.9; 52/794.1; 52/800.12

[58] **Field of Search** 52/90.1, 92.1, 52/93.2, 262, 264, 265, 267, 269, 271, 274, 284, 293.3, 309.7, 309.9, 309.11, 309.16, 592.1, 592.3, 656.4, 794.1, 800.1, 800.11, 800.12, 801.1, 802.1, 276, 277, 279

[56] **References Cited**

U.S. PATENT DOCUMENTS

2,175,579 10/1939 Stratton 52/592.1
 3,462,897 8/1969 Weinrott 52/265 X
 3,665,662 5/1972 Timbrook et al. 52/262

3,719,016 3/1973 Randolph 52/265 X
 3,874,983 4/1975 Hay, II et al. 52/309.9 X
 4,057,948 11/1977 Wise 52/265 X
 4,163,349 8/1979 Smith
 4,283,898 8/1981 Claver 52/584.1
 4,628,650 12/1986 Parker 52/265
 4,633,634 1/1987 Nemmer et al. 52/474
 4,712,352 12/1987 Low 52/794.1
 4,720,948 1/1988 Hcaley et al.
 5,245,809 9/1993 Harrington 52/309.11
 5,265,389 11/1993 Mazzone et al. 52/309.7
 5,269,109 12/1993 Gulur 52/309.9
 5,373,678 12/1994 Hesser 52/309.9 X
 5,497,589 3/1996 Porter 52/592.1 X
 5,524,400 6/1996 Schmechel 52/309.7 X

Primary Examiner—Carl D. Friedman

Assistant Examiner—Kevin D. Wilkens

Attorney, Agent, or Firm—Hopkins Roden Crockett Hansen & Hoopes, PLLC

[57] **ABSTRACT**

This invention discloses to an interlocking insulated panel building system that has expanded polystyrene panels sandwiched between inner and outer oriented strand board (OSB) skins. Structural strength is enhanced and thermal shorts are reduced by use of channels formed from typically 22 gauge (0.03") galvanized steel. The panels are interfitted by a tongue-and-groove system. The components of the system are wall panels, headers, sills, beams, and roof panels.

15 Claims, 8 Drawing Sheets

